

IN THE CLAIMS:

Kindly replace the claims of record with the following full set of claims:

1. (Currently amended) A method of motion-compensated predictive image encoding, comprising the steps of:
 - estimating (ME) first motion vectors (MVc, MVL, MVR, MVA, MVB) associated with a set of first objects of a fixed size, said motion vectors MVL, MVR, MVA, MVB being associated with first objects adjacent to a first object associated with the MVc motion vector;
 - filtering (MVPF) every occurrence of said first motion vectors (MVc, MVL, MVR, MVA, MVB) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects having a fixed size smaller than said first objects fixed size;
 - generating (3) prediction errors in dependence on said second motion vectors (MV1, MV2, MV3, MV4) only; and
 - combining (VLC) said first motion vectors (MVc, MVL, MVR, MVA, MVB) and said prediction errors[[:]] and
 - ~~providing~~ an indication said prediction errors are in dependence upon said second motion vectors.
2. (Previously presented) A method as claimed in claim 1, wherein said first objects are macro-blocks having a fixed size of (16*16) pixels, said second objects are blocks having a fixed size of (8*8) pixels and said filtering step (MVPF) comprises the steps of:

providing x and y motion vectors components of a given macro-block (MVc) and of macro-block (MVl, MVr, MVa, MVb) adjacent to said given macro-block (MVc); and

supplying for each block (MV1) of a number of blocks (MV1-MV4) corresponding to said given macro-block (MVc), x and y motion vector components respectively selected from said x and y motion vector components of said given macro-block (MVc) and from the x and y motion vector components of two blocks (MVl, MVa) adjacent to said block (MV1).

3 (Currently amended) A device for motion-compensated predictive image encoding comprising:

means for estimating (ME) first motion vectors (MVc, MVl, MVr, MVa, MVb) associated with a set of first objects of a fixed size, said motion vectors MVl, MVr, MVa, MVb being associated with first objects adjacent to a first object associated with the MVc motion vector;

means for filtering (MVPF) every occurrence of said first motion vectors (MVc, MV1, MVr, MVa, MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for second objects having a fixed size smaller than said first objects fixed size;

means for generating (3) prediction errors in dependence on said second motion vectors (MV1, MV2, MV3, MV4) only; and

means for combining (VLC) said first motion vectors (MVc, MVl, MVr, MVa, MVb) and said prediction errors[[:]] and

~~means for providing~~ an indication said prediction errors are in dependence upon said second motion vectors.

4. (Currently amended) A method of motion-compensated predictive decoding, comprising the steps of:

responsive to an indication of processing prediction errors that are in dependence upon a second motion vectors,

generating (VLC^{-1}) first motion vectors (MV_c , MV_l , MV_r , MV_a , MV_b) and prediction errors from an input bit-stream, said first motion vectors (MV_c , MV_l , MV_r , MV_a , MV_b) relating to first objects of a fixed size, and said motion vectors MV_l , MV_r , MV_a , MV_b being associated with first objects adjacent to a first object associated with the MV_c motion vector, and said prediction errors related to second objects having a fixed size smaller than said first objects fixed size only;

filtering (MVPF) every occurrence of said first motion vectors (MV_c , MV_l , MV_r , MV_a , MV_b) to obtain second motion vectors (MV_1 , MV_2 , MV_3 , MV_4) for said second objects; and

generating (15, MC) an output signal in dependence on said prediction errors and said second motion vectors (MV_1 , MV_2 , MV_3 , MV_4) and an indication said prediction errors are in dependence upon said second motion vectors.

5. (Previously presented) A method as claimed in claim 4, wherein said first objects are macro-blocks having a fixed size of (16*16) pixels, said second objects are blocks having a fixed size of (8*8) pixels, and said filtering step (MVPF) comprises the steps of:

providing x and y motion vectors components of a given macro-block (MVc) and of macro-block (MVl, MVr, MVa, MVb) adjacent to said given macro-block (MVc); and supplying for each block (MV1) of a number of blocks (MV1-MV4) corresponding to said given macro-block (MVc), x and y motion vector components respectively selected from said x and y motion vector components of said given macro-block (MVc) and from the x and y motion vector components of two blocks (MV1, MVa) adjacent to said block (MV1).

6. (Currently amended) A device for motion-compensated predictive decoding, comprising:

means for [[determining]] receiving an indication of processing prediction errors that are in dependence upon second motion vectors,

means for generating (VLC⁻¹) first motion vectors (MVc, MVl, MVr, MVa, MVb) and prediction errors from an input bit-stream, said first motion vectors (MVc, MVl, MVr, MVa, MVb) relating to first objects of a fixed size, said motion vectors MVl, MVr, MVa, MVb being associated with first objects adjacent to a first object associated with the MVc motion vector, and said prediction errors related to second objects (8*8) only;

means for filtering (MVPF) every occurrence of said first motion vectors (MVc, MVl, MVr, MVa, MVb) to obtain second motion vectors (MV1, MV2, MV3, MV4) for said second objects having a fixed size smaller than said first objects fixed size; and

means for generating (15, MC) an output signal in dependence on said prediction errors and said second motion vectors (MV1, MV2, MV3, MV4).

7. (Previously presented) A multi-media apparatus, comprising:

means (T) for receiving a motion-compensated predictively encoded image signal; and

a motion-compensated predictive decoding device as claimed in claim 6 for generating a decoded image signal.

8. (Previously presented) An image signal display apparatus comprising:

means (T) for receiving a motion-compensated predictively encoded image signal;

a motion-compensated predictive decoding device as claimed in claim 6 for generating a decoded image signal; and

means (D) for displaying said decoded image signal.

9. (Currently amended) A method for generating a motion-compensated predictively encoded image signal, comprising:

estimating first motion vectors (MVc, MVl, MVr, MVa, MVb) related to first objects of size (16*16) pixels; obtaining second motion vectors (MVl, MV2, MV3, MV4) for second objects of size (8*8) pixels from said first motion vectors (MVc, MVl, MVr, MVa, MVb), generating prediction errors relating to every occurrence of second objects, wherein said prediction errors depend on said second motion vectors (MV1, MV2, MV3, MV4) only and ~~providing~~ an indication said prediction errors are in dependence upon said second motion vectors.